CITY OF NEWPORT BEACH

BUILDING DEPARTMENT

3300 NEWPORT BLVD.
P.O.BOX 1768, NEWPORT BEACH, CA
(949) 644-3275

TENANT IMPROVEMENT

ELECTRICAL / MECHANICAL / PLUMBING PLAN CHECK

Project Description:		
Project Address:		
Plan Check No.:	Date Filed:	No. Stories:
Use:	Occupancy:	Const. Type:
Architect/Engineer:		Phone:
Owner:	Phone:	Submitted Valuation:
Checked by:	Phone: (949) 644-32	Permit Valuation:

[X] 1st Check [ ] 2nd Check [ ] 3rd Check
[ ] 4th Check*

***NOTE: Do not resubmit after the 3rd plan check. Call plan check engineer for an in-person recheck appointment.**

WARNING:* *PLAN CHECK EXPIRES 180 DAYS AFTER SUBMITTAL.
THIS PLAN CHECK EXPIRES ON: _____

Approval of plans and specifications does not permit violation of any section of the Building Code or other City ordinances or State law.

This plan check is according to 2007 California Electrical, Mechanical and Plumbing Codes.

- Make all corrections listed below
- Resubmit originally checked plans and indicate the location of response on this sheet. **DO NOT** resubmit after the third check. Call plan check engineer and schedule in-person recheck.
- Return this sheet with corrected plans
- For checking status of plans: call **(949) 644-3288** during business hours, or may be verified 24 hours 7 days a week via the Internet at: ***www.newportbeachca.gov/building/*** **or interactive voice at (949) 644-3255**
- For clarifications on corrections, you may call the Plan Check Engineer or schedule an appointment to see him/her.
- Codes used: 2007 CEC; 2007 CMC; 2007 CPC; Title 24-2008 California Energy Efficiency Standards for electrical and mechanical systems
- When new information is provided after plan check due to corrections or otherwise, additional reviewing time may be necessary upon resubmittal. Review of new information may result in additional corrections.

ELECTRICAL

1. All plans and electrical calculations are to be designed by a licensed professional; provide wet stamp with signature and expiration date, or provide signature of licensed design building electrical contractor.

2. Add note to electrical plans, "All work to comply with 2007 Calif. Electric Code."

3. Provide single line diagram; show electrical panel load schedules, conduit and conductor sizes and ground electrode detail.

4. Electrical panel load schedules are to show the following: Number of fixtures on each circuit; Load at 180 watts per general use receptacle or U.L. nameplate rating; total wattage per each phase balanced; long continuous loads [LCL] calculations to be shown at 125%.

5. Electrical panel load schedules that reference "Spare" or "Existing" loads require clarification.

6. Provide available fault current from Southern California Edison service planner and documentation of preliminary design approval, SCE "B" drawing or red line drawing.

7. Job site meeting required with contractor, E.M.P. plan checker and SCE service planner prior to electrical plan check approval.

8. Show grounding electrode system for all electrical service equipment / transformers / panels.

9. Show all required clearances in front of electrical services / panels / equipment.

10. Show all overcurrent devices; provide A.I.C. rating; series combination equipment will require listing information.

11. Electrical circuitry diagrams are to be accurate; provide numbers next to each circuit on plans.

12. Provide rated electrical disconnect switch at water heaters or lock-out device at circuit breakers.

13. Provide engineer's calculations for support of elevated transformers.

14. Show maximum overcurrent protection on primary and secondary side of transformers.

15. Show maximum distance (25 feet) from transformer to secondary overcurrent protection.

16. Provide information on type, size and location of transformers, with required clearances.

17. Provide light fixture schedule, show manufacture specifications, lamp wattage and total fixture wattage.

18. Provide electrical Title 24 and 2005 Calif. Energy Efficiency Standards. All required compliance forms and mandatory measures are to be on the plans; LTG-1-C is required to be on the plans, (LTG-2-C, LTG-3-C, LTG-4-C, LTG-5-C, LTG-6-C, LTG-7-C, LTG-8-C, LTG-9-C when applicable).

19. Add note to plans, "Comply with City of Newport Beach amendments to 2007 CEC." Use rigid metal conduit in all areas exposed to weather. Use ground wire inside all flexible metal conduit. Metal conduit shall not be installed in contact with earth.

20. Unfused service entrance conductors extending horizontally into the building are not approved unless encased in minimum 2 inches of concrete.

21. Add note to plans, “All equipment to be U.L. listed or equivalent.”

22. Add note to plans: “Use of general anesthesia in critical care areas which patients are subjected to invasive procedures and are connected to line operated, electro-medical devices will require an emergency power source, which requires a separate submittal and building permit.”

23. Comply with Article 517: All branch circuits serving patient care areas / exam rooms shall be provide with a ground path for fault current by installation in a metal raceway system or cable assembly, which shall itself qualify as an equipment grounding return path in accordance with Section 250.118. Type AC, MC and MI cable shall have an outer metal armor or sheath that is identified as an acceptable grounding return path.

24. Add note to plans, “All equipment to be U.L. listed or equivalent.”

MECHANICAL

25. Add note to mechanical plans, “All work to comply with 2007 California Mechanical Code.”

26. All plans and mechanical calculations are to be designed by a licensed professional. Provide wet stamp with signature and expiration date or provide signature of licensed design building mechanical contractor.

27. Identify fire-rated corridors, walls, ceilings and floor assemblies on the mechanical plans to verify appropriate provisions for the fire penetration protection.

28. Show all fire dampers / fire smoke dampers and listings on plans.

29. Show auto-shutoffs in systems with excess of 2000 cfm and smoke detectors in the system.

30. Show complete distribution system of the plans. Show all size and type of ducts and sheet metal thickness and insulation materials used.

31. Show seismic restraint for HVAC systems on plans.

32. Provide return and supply registers in all office spaces.

33. Show all location of HVAC equipment on plans.

34. Show roof access to HVAC equipment on roof.

35. Show location of fan coil and condensers on plans.

36. Provide combustion air requirements and sizes for equipment located in confined spaces.

37. Provide mechanical equipment schedule identifying the equipment manufacturer and model numbers with specifications.

38. Provide mechanical Title 24, 2005 Calif. Energy Efficiency Standards, all required compliance forms and mandatory measures are to be on the plans; MECH-1-C, is required to be on the plans (MECH-2-C, MECH-3-C, MECH-4-C when applicable).

39. Specify classification of product conveying ducts per 2007 California Mechanical Code.

40. Specify make-up air source for exhaust system(s).

41. All exhausts including dryer, cooking hood and toilet exhausts must be shown on plans. Clothes dryer vents exceeding 14 feet are to be engineered.

42. Type of cooking equipment should be clearly identified with clearance to combustibles details and compliance with manufactures requirements.

43. Provide calculations on Type I hood(s) and duct(s) rate of air flow including, velocities and correct CFM.

44. Provide note on plans Type I, "Hood requires air balance report for final inspection."

45. Provide manufacturers listing on approved Type I hood fire-resistive duct wrap / minimum 2-layer system required.

46. Roof details will be required for exhaust system / show location and dimensions of all terminations.

47. Boilers over 400,000 Btu will require a one-hour fire rated room.

48. Hot water boilers must have required expansion tanks.

49. Boilers will require temp./press. discharge piping to terminate at exterior grade, floor sink, or dedicated roof top receptor.

50. Show gas piping / pipe sizes and equipment; CFH requirements and total developed length of gas piping including branches per Table 12, per 2007 CPC.

51. Plans are incomplete, additional corrections may follow.

PLUMBING

52. Add note to plumbing plans, "All work to comply with 2007 California Plumbing Code."

53. All plans and plumbing calculations are to be designed by a licensed professional. Provide wet stamp with signature and expiration date or provide signature of licensed design build plumbing contractor.

54. Provide complete drain and vent system drawings / riser diagrams.

55. Show intended size of all sewer / waste lines / vents.

56. Show size of all water supply lines / provide calculations, Appendix "A" CPC.

57. Show type and location of all backflow protection.

58. Show size and type of material for proposed roof drain system. Rainwater systems are to be sized per 2007 CPC Table 11-1 and 11-2 at 2" rainfall per hour.

59. Show gas piping / pipe sizes and equipment, CFH requirements and total developed length of gas piping including branches per Table 12, per 2007 CPC.

60. Medium pressure systems over 14 inches W.C.(1/2 P.S.I.) must have a pre-approval from the gas supplier, a mechanical equipment demand of 3,000,000 BTU or more and would require pipe sizing larger than 4 inches to meet C.F.H. demand. An "Alternate Methods of Construction" request form must be submitted to the Building Department for review prior to approval of request for medium pressure gas.

61. Gas regulators must be vented to the outside / show detail on plans.

62. Show location and type of water heater / boiler.

63. Provide water heater venting detail and temperature pressure piping discharge location and exterior grade or floor sink. Safety pan to discharge to exterior observable location.

64. Provide expansion tank for hot water / water heater system.

65. Provide seismic restraint detail for water heater / boiler.

66. Provide approved permanent access to water heater / boiler.

67. Note combustion air requirements for gas fired water heater / boiler.

68. Show location and size of all sanitary waste cleanouts.

69. Note on plans that all waste lines to be minimum 2% slope.

70. Show detail of hydro-mechanical interceptor (grease trap), clarifier or grease interceptor on the plans.

71. Show location of required flow control and venting for hydro-mechanical interceptor (grease trap).

72. This project is required to have a hydro-mechanical interceptor (grease trap)/grease interceptor. Show all grease waste piping on the plans.

73. Size grease interceptor per Table 10-3, 2007 California Plumbing Code, (500 gallon or more).

74. Size hydro-mechanical interceptor (grease trap) per 2007 California Plumbing Code, Section 1014 and NBMC, minimum size requirement of 50 G.P.M. flow rate, 50 gallon liquid capacity and 100 pound grease retention capacity (maximum 4 fixtures).

75. Hydro-mechanical interceptor (grease trap) requires vented flow control at inlet of grease trap and at the tailpiece of 2 or 3 compartment sink to restrict flow.

76. Hydro-mechanical interceptors (grease traps) will require the use of a supplemental sediment trap to be installed between designated plumbing fixtures (2 or 3 compartment sinks and pre-rinse sinks) prior to discharging to the hydro-mechanical interceptor (grease trap).

77. Show all pre-rinse sinks, floor drains, mop sinks, two or three compartment sinks in food preparation area to be connected to grease interceptor / hydro-mechanical interceptor (grease trap).

78. No food waste disposal unit or dishwashers are allowed to discharge through a hydro-mechanical interceptor (grease trap) or grease interceptor.

79. Note type of fire penetration protection for rated fire wall/floor/ceiling assemblies.

80. Fire Department approval will be required for any fuel storage tank and piping, L.P.G., L.N.G. systems and medical gas piping.

81. Primary condensate piping to terminate at tailpiece of lavatory/sink in the unit it serves, floor sink or dedicated roof top receptor.

82. Secondary compensate piping to terminate at exterior observable location, interior over lavatory/sink or use listed wet/float switch.

83. Add note to plans. Medical gas piping installation requires continuous third party inspection and certification by an approved inspection agency, certification documentation is to be submitted to building and safety prior to final inspection.

84. Provide required ventilation calculations for medical gas storage area per NFPA 99.

85. Plans are incomplete, additional corrections may follow.

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